

Mark L Leadbeater

List of Publications by Year in descending order

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69
papers

2,192
citations

236833

25
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223716

46
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70
all docs

70
docs citations

70
times ranked

955
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic field studies of elastic scattering and optic-phonon emission in resonant-tunneling devices. Physical Review B, 1989, 39, 3438-3441.	1.1	187
2	Detection of single photons using a field-effect transistor gated by a layer of quantum dots. Applied Physics Letters, 2000, 76, 3673-3675.	1.5	142
3	Single-photon emission from exciton complexes in individual quantum dots. Physical Review B, 2001, 64, .	1.1	142
4	Epitaxial ferromagnetic InMnAl films on GaAs. Applied Physics Letters, 1990, 57, 2609-2611.	1.5	116
5	Magnetotunneling spectroscopy of a quantum well in the regime of classical chaos. Physical Review Letters, 1994, 72, 2608-2611.	2.9	102
6	Sequential tunneling due to intersubband scattering in double-barrier resonant tunneling devices. Applied Physics Letters, 1988, 52, 212-214.	1.5	101
7	Observation of intrinsic bistability in resonant tunnelling devices. Electronics Letters, 1988, 24, 1190.	0.5	97
8	Magnetotransport in a nonplanar two-dimensional electron gas. Physical Review B, 1995, 52, R8629-R8632.	1.1	86
9	High-frequency acousto-electric single-photon source. Physical Review A, 2000, 62, .	1.0	81
10	Magnetic field studies of negative differential conductivity in double barrier resonant tunnelling structures based on n-InP/(InGa)As. Solid-State Electronics, 1988, 31, 707-710.	0.8	80
11	Electronic processes in double-barrier resonant-tunneling structures studied by photoluminescence spectroscopy in zero and finite magnetic fields. Physical Review B, 1990, 41, 10754-10766.	1.1	80
12	Observation of space-charge bulk-up and thermalisation in an asymmetric double-barrier resonant tunnelling structure. Journal of Physics Condensed Matter, 1989, 1, 10605-10611.	0.7	75
13	Charge build-up and intrinsic bistability in an asymmetric resonant-tunnelling structure. Semiconductor Science and Technology, 1988, 3, 1060-1062.	1.0	71
14	Electrical and spectroscopic studies of space-charged buildup, energy relaxation and magnetically enhanced bistability in resonant-tunneling structures. Solid-State Electronics, 1989, 32, 1101-1108.	0.8	63
15	Universal conductance fluctuations in the magnetoresistance of submicron-size n ⁺ -GaAs wires and laterally confined n ⁺ -GaAs/(AlGa)As heterostructures. Surface Science, 1988, 196, 52-58.	0.8	54
16	Current bistability in double-barrier resonant-tunneling devices. Physical Review B, 1989, 39, 6205-6207.	1.1	53
17	Galvanomagnetic properties of epitaxial MnAl films on GaAs. Journal of Applied Physics, 1991, 69, 4689-4691.	1.1	49
18	Single Photon Detection with a Quantum Dot Transistor. Japanese Journal of Applied Physics, 2001, 40, 2058-2064.	0.8	43

#	ARTICLE	IF	CITATIONS
19	Quantum magnetic confinement in a curved two-dimensional electron gas. <i>Journal of Physics Condensed Matter</i> , 1994, 6, L127-L134.	0.7	41
20	Electron transport in a non-uniform magnetic field. <i>Journal of Physics Condensed Matter</i> , 1995, 7, L307-L315.	0.7	40
21	Inter-Landau-level transitions of resonantly tunnelling electrons in tilted magnetic fields. <i>Semiconductor Science and Technology</i> , 1991, 6, 1021-1024.	1.0	36
22	Quantum magnetic confinement and transport in spherical two-dimensional electron gases. <i>Physical Review B</i> , 1995, 52, R8646-R8649.	1.1	35
23	Electroluminescence and impact ionization phenomena in a double-barrier resonant tunneling structure. <i>Applied Physics Letters</i> , 1991, 58, 1164-1166.	1.5	30
24	Hybrid magneto-electric states in resonant tunnelling structures. <i>Superlattices and Microstructures</i> , 1989, 5, 527-530.	1.4	29
25	Resonant tunnelling studies of magnetoelectric quantisation in wide quantum wells. <i>Journal of Physics Condensed Matter</i> , 1989, 1, 4865-4871.	0.7	25
26	Far-infrared emission and absorption by hot carriers in superlattices. <i>Semiconductor Science and Technology</i> , 1992, 7, B1-B5.	1.0	20
27	Inverted bistability in the current-voltage characteristics of a resonant tunneling device. <i>Solid-State Electronics</i> , 1989, 32, 1467-1471.	0.8	19
28	Novel strained InP/InAs \times P \sim x quantum-well modulation-doped heterostructures. <i>Applied Physics Letters</i> , 1992, 60, 109-111.	1.5	17
29	Ballistic transport in resonant tunnelling devices with wide quantum wells. <i>Journal of Physics Condensed Matter</i> , 1989, 1, 3025-3030.	0.7	16
30	The effect of the X conduction band minima on resonant tunnelling and charge build-up in double barrier structures based on n-GaAs/(AlGa)As. <i>Solid-State Electronics</i> , 1989, 32, 1731-1735.	0.8	16
31	Optical investigation of charge accumulation and bistability in an asymmetric double barrier resonant tunneling heterostructure. <i>Surface Science</i> , 1990, 228, 373-377.	0.8	16
32	Hot-electron magnetospectroscopy in resonant tunneling devices: A probe of conduction-band anisotropy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1989, 7, 1041.	1.6	15
33	Magnetic field and capacitance studies of intrinsic bistability in double-barrier structures. <i>Superlattices and Microstructures</i> , 1989, 6, 59-62.	1.4	15
34	Electronic properties of a one-dimensional channel field effect transistor formed by molecular beam epitaxial regrowth on patterned GaAs. <i>Applied Physics Letters</i> , 1993, 63, 2219-2221.	1.5	15
35	A new technique for directly probing the intrinsic tristability and its temperature dependence in a resonant tunneling diode. <i>Solid-State Electronics</i> , 1994, 37, 961-964.	0.8	15
36	Investigations of double barrier resonant tunneling devices based on (AlGa)As/GaAs. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1988, 6, 1161.	1.6	14

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37	Magnetoplasmons in a Tunable Periodically Modulated Magnetic Field. <i>Physical Review Letters</i> , 1999, 83, 4425-4428.	2.9	13
38	Resonant magnetotunnelling spectroscopy: a direct probe of the complicated dispersion curves and negative mass behaviour of holes confined in a quantum well. <i>Surface Science</i> , 1992, 263, 199-206.	0.8	12
39	Electron reflection and interference in the GaAs/AlAs-Al Schottky collector resonant-tunneling diode. <i>Physical Review B</i> , 1998, 57, 1847-1854.	1.1	12
40	Optical investigation of a very asymmetric double-barrier resonant-tunneling structure. <i>Physical Review B</i> , 1992, 45, 6721-6730.	1.1	10
41	Quantum chaos in resonant tunneling diodes. <i>Physica B: Condensed Matter</i> , 1994, 201, 367-373.	1.3	10
42	Sequential tunnelling and magnetically enhanced bistability in double barrier resonant-tunnelling structures. <i>Physica Scripta</i> , 1991, T35, 215-220.	1.2	9
43	Magnetic field investigations of resonant tunnelling devices grown by MOCVD. <i>Superlattices and Microstructures</i> , 1989, 6, 193-197.	1.4	8
44	Quantum interference and space charge effects in double barrier structures incorporating wide quantum wells. <i>Solid-State Electronics</i> , 1989, 32, 1627-1631.	0.8	8
45	Tunneling spectroscopy of energy levels in wide quantum wells in tilted magnetic fields. <i>Physical Review B</i> , 1992, 45, 8749-8751.	1.1	8
46	Resonant and non-resonant processes in double barrier structures. <i>Superlattices and Microstructures</i> , 1989, 6, 63-66.	1.4	7
47	Tunneling into classically chaotic orbits in quantum wells. <i>Surface Science</i> , 1994, 305, 511-515.	0.8	6
48	Independently contacted double quantum well structure fabricated by molecular beam epitaxial regrowth. <i>Applied Physics Letters</i> , 1995, 66, 848-850.	1.5	6
49	The observation of electroluminescence in a double barrier resonant tunnelling structure. <i>Superlattices and Microstructures</i> , 1990, 8, 391-394.	1.4	5
50	The effect of conduction band anisotropy on hybrid magneto-electric states in resonant tunneling devices. <i>Surface Science</i> , 1990, 228, 433-436.	0.8	5
51	High pressure and high magnetic field studies of the two-dimensional electron gas at a CdTe/InSb interface. <i>Surface Science</i> , 1990, 229, 428-432.	0.8	4
52	Intrinsic bistability in the current-voltage characteristics and electroluminescent emission of resonant tunnelling structures. <i>Physica B: Condensed Matter</i> , 1991, 175, 263-270.	1.3	4
53	Magnetotunnelling spectroscopy: an experimental tool for studying chaos in quantum transport. <i>Semiconductor Science and Technology</i> , 1994, 9, 488-492.	1.0	4
54	Evidence of quantum lateral confinement in side-gated resonant tunnelling diodes formed by patterned substrate regrowth. <i>Applied Physics Letters</i> , 1996, 68, 1702-1704.	1.5	4

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55	Mobility ($106 \text{ cm}^2 \text{ V}^{-1} \text{ s}^{-1}$) of 2DEGs, 30 nm from ex situ patterned GaAs regrowth interfaces. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1998, 51, 202-206.	1.7	4
56	Ultrashort FETs formed by GaAs/AlGaAs MBE regrowth on a patterned δ -doped GaAs layer. <i>Journal of Crystal Growth</i> , 1999, 201-202, 761-764.	0.7	3
57	Exciton complexes in individual quantum dots as a single-photon source. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 13, 423-426.	1.3	3
58	Investigation of asymmetric double barrier resonant tunneling structures based on (AlGa)As/GaAs. <i>Journal of Crystal Growth</i> , 1989, 95, 352-356.	0.7	2
59	Magnetotransport in magnetic epitaxial metal layers buried in (Ga,Al)As heterostructures (invited) (abstract). <i>Journal of Applied Physics</i> , 1991, 69, 6117-6117.	1.1	2
60	Double two-dimensional electron gas structure formed by molecular beam epitaxy regrowth on a patterned GaAs back gate. <i>Applied Physics Letters</i> , 1994, 65, 1943-1945.	1.5	2
61	One-dimensional wire formed by molecular-beam epitaxial regrowth on a patterned pnpn GaAs substrate. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1994, 12, 1277.	1.6	2
62	Electron transport in a non-planar 2DEG. <i>Surface Science</i> , 1996, 361-362, 587-590.	0.8	2
63	One-dimensional electron transport in devices fabricated by MBE regrowth over a patterned δ -doped backgate. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2000, 6, 526-529.	1.3	1
64	Magnetocapacitance and photoluminescence spectroscopy studies of charge storage, bistability, and energy relaxation effects in resonant tunneling devices. , 1991, , .		0
65	Side-gated double barrier resonant tunnelling diodes formed by patterned substrate regrowth. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1995, 35, 198-202.	1.7	0
66	Low-dimensional devices fabricated by molecular beam epitaxy regrowth over patterned δ -doped backgates. <i>Microelectronics Journal</i> , 1999, 30, 315-318.	1.1	0
67	Far-infrared spectroscopy of a two-dimensional electron gas in a tunable, periodically modulated magnetic field. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2000, 6, 738-741.	1.3	0
68	Etudes sous champ magnétique de l'effet tunnel résonnant et non résonnant dans les structures à double barrière n-(AlGa)As/GaAs. <i>Revue De Physique Appliquée</i> , 1989, 24, 343-349.	0.4	0
69	Lifetime of blue polymer LEDs. , 0, , .		0